

Appendix U

Example Cost Calculation: 1999 Off-site Disposal of Emission Control Dust
(K061) Shifting to On-site Metals Recovery (2001 \$) Pre-Rule Cost Calculation Post-Rule Cost Calculation

Cost Inputs

Total Quantity of Hazardous Waste Generated 32,000 tons hazardous waste/yr Total Quantity of Hazardous Waste Generated (32,000 tons hazardous waste/yr) - (32,000 tons recovered waste/yr) + (32,000 tons recovered waste/yr * 0.32 fraction as residuals * 0.95 fraction characteristically hazardous) = 9,728 tons hazardous waste/yr
(recovered waste quantity no longer hazardous by definition)

Generator Status If (tons hazardous waste/yr > 13.2 tons/yr) then LQG Generator Status If (tons hazardous waste/yr > 13.2 tons/yr) then LQG

Quantity of Waste Recovered On Site 0 tons recovered waste/yr Quantity of Waste Recovered On Site 32,000 tons recovered waste/yr

Quantity of Waste Disposed Off Site (Hazardous Landfill) 32,000 tons disposed waste/yr Quantity of Waste Disposed Off Site (Hazardous Landfill) 0 tons disposed waste/yr

Estimated Residual Quantity * 32% of recovered waste quantity will be residual

(0.32) * (0 tons recovered waste/yr) = 0 tons residual/yr Estimated Residual Quantity 32% of recovered waste quantity will be residual

(0.32) * (32,000 tons recovered waste/yr) = 10,240 tons residual/yr

Estimated Hazardous Residual Quantity * 95% residual is characteristically hazardous;

(0.95) * (0 tons residual/yr) = 0 tons hazardous residual/yr Estimated Hazardous Residual Quantity 95% residual is characteristically hazardous;

(0.95) * (10,240 tons residual/yr) = 9,728 tons hazardous residual/yr

Estimated Nonhazardous Residual Quantity * 5% residual is nonhazardous;

(0.05) * (0 tons residual/yr) = 0 tons nonhazardous residual/yr Estimated Non-hazardous Residual Quantity 5% residual is nonhazardous;

(0.05) * (10,240 tons residual/yr) = 512 tons nonhazardous residual/yr

Estimated Recovered Product Quantity 15% of recovered waste quantity will be recovered metal product

(0.15) * (0 tons recovered waste) = 0 tons recovered metal Estimated Recovered Product Quantity 15% of recovered waste quantity will be recovered metal product

(0.15) * (32,000 tons recovered waste) = 4,800 tons recovered metal

Number of Off-site Hazardous Waste Residual Shipments per Year * 0 hazardous waste shipments per year Number of Off-site Hazardous Waste Residual Shipments per Year Given LQG and > 200 miles then maximum of (4 shipments or 9,728 tons recovery wastes/18 ton truck) = 540.4 hazardous waste shipments per year

Number of Off Site Disposal Shipments per Year (Hazardous Landfill) Given LQG and > 200 miles then maximum of (4 shipments or 32,000 tons disposal wastes/18 ton truck) = 1,777.8 disposal shipments per year Number of Off Site Disposal Shipments per Year (Hazardous Landfill) 0 disposal shipments per year

Number of Off-site Nonhazardous Waste Residual Shipments per Year * (0 tons nonhazardous residual/18 tons per truck) = 0 nonhazardous waste shipments per year Number of Off-site Non-Hazardous Waste Residual Shipments per Year (512 tons nonhazardous residual/18 tons per truck) = 28.4 nonhazardous waste shipments per year

Distance to Nearest Off-site Hazardous Waste Landfill 338 miles Distance to Nearest Off-site Hazardous Waste Landfill 338 miles

Distance to Nearest Off-site Non-hazardous Waste Landfill 50 miles Distance to Nearest Off-site Non-hazardous Waste Landfill 50 miles

Location of Generator Oregon Location of Generator Oregon

Cost Calculations (costs are positive and revenues are negative)

On-site Metal Recovery Cost \$1,933.5 * (0 tons recovered waste/yr)^{0.78} + \$6,744.4 * (0 tons recovered waste/yr)^{0.59} + \$23,685 = \$0/yr On-site Metal Recovery Cost \$1,933.5 * (32,000 tons recovered waste/yr)^{0.78} + \$6,744.4 * (32,000 tons recovered waste/yr)^{0.59} + \$23,685 = \$9,407,401/yr

Off-site Waste Disposal (Hazardous Waste Landfill) Given full truck loads (greater than 60% full): (\$153.42/ton) * (32,000 tons waste per yr) = \$4,909,440/yr Off-site Waste Disposal (Hazardous Waste Landfill) (\$153.42/ton) * (0 tons waste per yr) = \$0/yr

Residual Off-site Hazardous Landfill Cost maximum((\$320/ton) * (0 tons waste per yr) or (\$2,246/load) * (0

Hazardous Waste Shipments) = \$0/yr
 Residual Off-site Hazardous Landfill Costmaximum((\$320/ton) * (9,728 tons waste per yr) or (\$2,246/load) * (540.4 Hazardous Waste Shipments))= \$3,112,960/yr
 Residual Off-site Non-hazardous Landfill Cost(\$111/ton) * (0 tons non-hazardous residual per yr) = \$0/yr
 Residual Off-site Non-hazardous Landfill Cost(\$111/ton) * (512 tons non-hazardous residual per yr) = \$56,832/yr
 Waste Characterization Testing Cost(\$1,532/load) * (1,777.8 Hazardous Loads + 0 Non-Hazardous Load) = \$2,723,590/yr
 Waste Characterization Testing Cost(\$1,532/load) * (540.4 Hazardous Loads + 28.4 Non-Hazardous Load) = \$871,402/yr
 Manifesting Costs(\$236/shipment) * (1,777.8 shipments/yr) = \$419,561/yr
 Manifesting Costs(\$236/shipment) * (540.4 hazardous shipments/yr) + (\$89/shipment) * (28.4 shipments/yr) = \$130,062/yr
 Loading Costs(\$2.57/ton) * (32,000 tons recovered waste) = \$82,240/yr
 Loading Costs(\$2.57/ton) * (10,240 tons residual) = \$26,317/yr
 Residual Waste Transportation Costs(\$3.73/mile)*(0 hazardous waste shipments/yr)*(338 miles to hazardous landfill/hazardous waste shipment) + (\$2.16/mile)*(0 nonhazardous waste shipments/yr)*(50 miles to nonhazardous Landfill/nonhazardous waste shipment) = \$0/yr
 Residual Waste Transportation Costs(\$3.73/mile)*(540.4 hazardous waste shipments/yr)*(338 miles to hazardous landfill/hazardous waste shipment) + (\$2.16/mile)*(28.4 nonhazardous waste shipments/yr)*(50 miles to nonhazardous Landfill/nonhazardous waste shipment) = \$684,371/yr
 Disposal Waste Transportation Cost(\$3.73/mile)*(1,777.8 hazardous waste shipments/yr)*(338 miles to hazardous landfill/hazardous waste shipment) = \$2,241,343/yr
 Disposal Waste Transportation Cost(\$3.73/mile)*(0 hazardous waste shipments/yr)*(338 miles to hazardous landfill/hazardous waste shipment) = \$0/yr
 Salvage (Recovered Product) Value(\$643/ton metal) * (0 tons recovered metal/yr) = \$0/yr
 Salvage (Recovered Product) Value(\$643/ton metal) * (4,800 recovered metal/yr) = \$3,086,400/yr
 Hazardous Material Training CostGiven LQG then \$9,794/yr
 Hazardous Material Training CostGiven LQG then \$9,794/yr
 Manifest Training CostGiven LQG then \$1,828/yr
 Manifest Training CostGiven LQG then \$1,828/yr
 Biennial Report/General Administrative Duties CostGiven LQG then \$2,430/yr
 Biennial Report/General Administrative Duties CostGiven LQG then \$2,430/yr
 Contingency Planning CostGiven LQG then \$2,796
 Contingency Planning CostGiven LQG then \$2,796
 Initial Waste Characterization Cost\$6,160
 Initial Waste Characterization Cost\$6,160
 Exclusion Filing Fee (One time Expenditure)\$0
 Exclusion Filing Fee (One time Expenditure)\$639
 State Facility Tax/FeeGiven Oregon and LQG then: \$525 activity verification fee/yr
 State Facility Tax/FeeGiven Oregon and LQG then: \$525 activity verification fee/yr
 State Generation Tax/FeeGiven Oregon then: (\$45 generation fee/ton) * (32,000 tons disposed waste/yr) = \$1,440,000/yr
 State Generation Tax/FeeGiven Oregon then: (\$45 generation fee/ton) * (9,728 tons residual/yr) = \$437,360/yr

Total\$11,839,707/yr\$11,664,477/yr

Incremental Costs-\$175,230/yr

*Residual costs are included in the cost for off-site commercial treatment and disposal

Appendix V

Example Cost Calculation: 1999 Off-site Disposal of Spent Aluminum Potliner

(K088) shifting to On-site Sodium Fluoride Recovery (2001 \$)

Pre-Rule Cost Calculation Post-Rule Cost Calculation

Cost Inputs

Total Quantity of Hazardous Waste Generated 360 tons hazardous waste/yr
 Total Quantity of Hazardous Waste Generated (360 tons hazardous waste/yr) - (360 tons recovered waste/yr) + (360 tons recovered waste/yr * 0.32 fraction as residuals * 0 fraction characteristically hazardous) =
 0 tons hazardous waste/yr

(recovered waste quantity no longer hazardous by definition)

Generator Status If (tons hazardous waste/yr > 13.2 tons/yr) then LQG
 Generator Status If (1.3 tons/yr > tons hazardous waste/yr) then CESQG (Not a Generator)

Quantity of Waste Recovered On Site 0 tons recovered waste/yr
 Quantity of Waste Recovered On Site 360 tons recovered waste/yr

Quantity of Waste Disposed Off Site 360 tons recovered waste/yr
 Quantity of Waste Disposed Off Site 0 tons recovered waste/yr

Estimated Residual Quantity * 33% of recovered waste quantity will be residual

(0) * (0 tons recovered waste/yr) = 0 tons residual/yr
 Estimated Residual Quantity 32% of recovered waste quantity will be residual

(0.32) * (360 tons recovered waste/yr) = 119 tons residual/yr

Estimated Hazardous Residual Quantity * 100% residual is Listed hazardous;

(1.00) * (0 tons residual/yr) = 0 tons hazardous residual/yr
 Estimated Hazardous Residual Quantity 0% residual is characteristically hazardous;

(0) * (119 tons residual/yr) = 0 tons hazardous residual/yr

Estimated Nonhazardous Residual Quantity * 0% residual is nonhazardous;

(0) * (0 tons residual/yr) = 0 tons nonhazardous residual/yr
 Estimated Non-hazardous Residual Quantity 100% residual is nonhazardous;

(1.0) * (119 tons residual/yr) = 119 tons nonhazardous residual/yr

Estimated Recovered Product Quantity 2% of recovered waste quantity will be recovered sodium fluoride product
 (0.02) * (0 tons recovered waste) = 0 tons recovered sodium fluoride
 Estimated Recovered Product Quantity 2% of recovered waste quantity will be recovered sodium fluoride product

(0.02) * (360 tons recovered waste) = 7.2 tons recovered sodium fluoride

Number of Off-site Hazardous Waste Residual Shipments per Year * 0 hazardous waste shipments per year
 Number of Off-site Hazardous Waste Residual Shipments per Year 0 hazardous waste shipments per year

Number of Off Site Disposal Shipments per Year Given LQG and > 200 miles then maximum of (4 shipments or 360 tons recovery wastes/18 ton truck) = 20 recovery shipments per year
 Number of Off Site Recovery Shipments per Year 0 recovery shipments per year

Number of Off-site Nonhazardous Waste Residual Shipments per Year * (0 tons nonhazardous residual/18 tons per truck) = 0 nonhazardous waste shipments per year
 Number of Off-site Non-Hazardous Waste Residual Shipments per Year (119 tons nonhazardous residual/18 tons per truck) = 6.6 nonhazardous waste shipments per year

Distance to Nearest Off-site Hazardous Waste Incineration Facility 1000 miles
 Distance to Nearest Off-site Hazardous Waste Incineration Facility 1000 miles

Distance to Nearest Off-site Non-hazardous Waste Landfill 50 miles
 Distance to Nearest Off-site Non-hazardous Waste Landfill 50 miles

Location of Generator Oregon Location of Generator Oregon

Cost Calculations (costs are positive and revenues are negative)

On-site Sodium Fluoride Recovery Cost (\$465/ton) * (0 tons recovered waste/yr)^{0.9} + (\$4,136/ton) * (0 tons recovered waste/yr)^{0.6} \$53,603 = \$0/yr
 On-site Sodium Fluoride Recovery Cost (\$465/ton) * (360 tons recovered waste/yr)^{0.9} + (\$4,136/ton) * (360 tons recovered waste/yr)^{0.6} \$53,603 = \$287,898/yr

Off-site Incineration Cost (\$551.5/ton) * (360 tons incinerated waste/yr) = \$198,551/yr
 Off-site Incineration Cost Given small loads (less than 60% of a full 18 ton load): (\$170/ton + \$25.50/ton surcharge) * (0 tons incinerated waste/yr) = \$0/yr

Residual Off-site Hazardous Landfill Cost (\$320/ton) * (0 tons hazardous residual per yr) = \$0/yr
 Hazardous Landfill Cost (\$320/ton) * (0 tons hazardous residual per yr) = \$0/yr
 Residual Off-site Non-hazardous Landfill Cost(\$111/ton) * (0 tons non-hazardous residual per yr) = \$0/yr
 Off-site Non-hazardous Landfill Cost(\$111/ton) * (119 tons non-hazardous residual per yr) = \$13,209/yr
 Waste Characterization Testing Cost(\$1,410/load) * (20 Hazardous Loads + 0 Non-Hazardous Load) = \$28,200/yr
 Waste Characterization Testing Cost(\$1,410/load) * (0 Hazardous Loads + 6.6 Non-Hazardous Load) = \$9,306/yr
 Manifesting Costs(\$236/shipment) * (20 shipments/yr) = \$4,720/yr
 Manifesting Costs(\$89/shipment) * (6.6 shipments/yr) = \$587/yr
 Loading Costs(\$2.57/ton) * (360 tons recovered waste) = \$925/yr
 Loading Costs(\$2.57/ton) * (119 tons residual) = \$306/yr
 Residual Waste Transportation Costs(\$3.73/mile)*(0 hazardous waste shipments/yr)*(1,000 miles to hazardous incineration/hazardous waste shipment) + (\$2.16/mile)*(0 nonhazardous waste shipments/yr)*(50 miles to nonhazardous landfill/nonhazardous waste shipment) = \$0/yr
 Transportation Costs(\$3.73/mile)*(0 hazardous waste shipments/yr)*(1,000 miles to hazardous incineration/hazardous waste shipment) + (\$2.16/mile)*(6.6 nonhazardous waste shipments/yr)*(50 miles to nonhazardous landfill/nonhazardous waste shipment) = \$713/yr
 Disposed Waste Transportation Cost(\$3.73/mile) * (20 hazardous waste shipments/yr)*(1,000 miles to hazardous incineration/hazardous waste shipment) = \$74,600/yr
 Disposed Waste Transportation Cost(\$3.73/mile) * (0 hazardous waste shipments/yr)*(1,000 miles to hazardous incineration/hazardous waste shipment) = \$0/yr
 Salvage (Recovered Product) Value(\$1,240/ton sodium fluoride) * (0 tons recovered acid/yr) = \$0/yr
 Salvage (Recovered Product) Value(\$1,240/ton sodium fluoride) * (7.2 tons recovered acid/yr) = \$8,928/yr
 Hazardous Material Training CostGiven LQG then \$9,794/yr
 Hazardous Material Training CostGiven Not a Generator then \$0/yr
 Manifest Training CostGiven LQG then \$1,828/yr
 Manifest Training CostGiven Not a Generator then \$0/yr
 Biennial Report/General Administrative Duties CostGiven LQG then \$2,430/yr
 Biennial Report/General Administrative Duties CostGiven Not a Generator then \$0/yr
 Contingency Planning CostGiven LQG then \$2,796
 Contingency Planning CostGiven Not a Generator then \$0
 Initial Waste Characterization Cost\$6,160
 Initial Waste Characterization Cost\$6,160
 Exclusion Filing Fee (One time Expenditure)\$0
 Exclusion Filing Fee (One time Expenditure)\$639
 State Facility Tax/FeeGiven Oregon and LQG then: \$525 activity verification fee/yr
 State Facility Tax/FeeGiven Oregon and Not a Generator then: \$0 activity verification fee/yr
 State Generation Tax/FeeGiven Oregon then: (\$45 generation fee/ton)*(360 tons recovered waste/yr) = \$16,200/yr
 State Generation Tax/FeeGiven Oregon then: (\$45 generation fee/ton)*(0 tons residual/yr) = \$0/yr

Total\$346,728/yr\$308,842/yr

Incremental Costs- \$37,887/yr

*Residual costs are included in the costs for off-site commercial incineration.

Appendix W

Methodology for Estimating Residual Generation and Management

This appendix presents the methodology used regarding metal, solvent, and acid recovery residual generation and disposal.

Using 1999 BRS data, facilities reporting waste management with system types M013, M021, and M031 were reviewed. Due to the limited number of facilities reporting wastes managed with system types M013 and M031, all such facilities were reviewed. Facilities reporting management by system type M021 were divided into 5 groups, approximately equal in number, based on the mass of waste managed by system type M021. Six facilities were selected from each group. The groups were divided as follows: less than 1.1 tons managed, 1.1 to 5 tons managed, 5 to 13.5 tons managed, 13.5 to 55 tons managed, and greater than 55 tons managed. The tables below present the data results.

The following assumptions were made regarding the recovery processes:

- Reclamation systems for acid and solvents are closed loop. That is no losses from spillage or waste are assumed. This is a simplification of the actual process as many processes may include settlement tanks or other open-air sections that may allow evaporation or spillage.
- All ineffective products are removed with the process residuals. An effectiveness factor or assay value is included to estimate the “purity” of the recovered solvent, acid, or metal.
- Mass is assumed to be balanced in the acid and solvent recovery process. No additives or precipitants are assumed into the process, or the change in product/residual mass in comparison to the total mass is minor. The recovery of metals process, 68 percent of the waste stream mass is assumed to contain the product metals and components that are volatilized (e.g., water vapor). Twenty (20) percent of the waste stream is assumed recovered as metals in higher quality wastes and five percent in lower quality wastes. Thirty-two (32) percent is assumed to be residual waste. The mass recovery of products is discussed further below.

Metals Recovery Statistics

No. Data Points 7

Range 0.42 to 84 percent

Average 32 percent

Standard Deviation 33.92 percent

DPRA reviewed a total of 19 facilities reporting wastes managed by M013 in the 1999 BRS. One additional facility, for a total of seven facilities, was able to be used in a percent residual assumption. Residual waste streams could not be identified in the remaining facilities.

The management system type reported for the residuals identified from M013 system processes are M061, M111, M112, M119, and M132. Five of seven waste generating facilities managed the M013 residuals by stabilization (M111, M112, and M119). The likely final deposition of the stabilized wastes are in a RCRA Subtitle C hazardous waste landfill.

**Solvent Recovery
Statistics**

No. Data Points 23
Range 0.46 to 140 percent
Average 33 percent
Standard Deviation 32.13 percent

Residuals generated by M021 system processes were reported managed by the following system types; M042, M051, M061, and M081. An total of 28 facilities were reviewed, of which 5 facility residual waste streams could not be identified. Fuel blending (M061) was reported by 17 of 22 facilities for management of M021 residuals. An additional three facilities managed M021 residuals by other co-burning or incineration systems (M042 and M051).

**Acid Recovery
Statistics**

No. Data Points 18
Range 0 to 105 percent
Average 26 percent
Standard Deviation 31.92 percent

Residuals generated by M031 system processes were assumed to be similar in form to the spent acid waste stream. That is, the contaminants (generally metals) were concentrated in a smaller portion of the waste stream for management. The disposal quantities of these residuals were identified by their description and management system type. An total of 23 facilities were reviewed, of which 5 facility residual waste streams could not be identified. Residuals were reported managed by M039, M042, M043, M051, M077, M104, M109, M121, M134, M136. Chemical precipitation (M077) was reported by seven of eighteen facilities for management of M031 residuals. One additional facility reported management by neutralization only (M121), which is similar to chemical precipitation.

The analysis should use the average residual generation values listed above. Metal recovery residuals will be managed by stabilization and Subtitle C landfill. Solvent residuals are managed by energy recovery. Acid recovery residuals are managed by chemical precipitation. Cost assumptions for management of acid recovery residuals will include stabilization and landfill disposal of precipitates, and sewer discharge of neutralized wastewater.

Appendix X

Analysis of Metals Containing and Organic Liquid Disposal Quantities

This appendix presents the review of selected metals containing liquids and organic liquids waste streams to determine the potential for or quantity of mis-categorized disposed waste streams. Disposed wastes streams 1999 BRS data was reviewed for the final disposition in the case of metals containing liquids and the description in the case of organic liquids. Metals containing liquids may be classified as disposed based on the reported 1999 Biennial Report management methods, but the waste may be managed further and metals content recovered. The final disposal/management method may not be reflected in the reporting by the disposing facility. For example, metals containing liquids reported managed by chemical precipitation (M077) may be disposed in a landfill or shipped to a high temperature metals recovery facility. In which case, the waste streams should be classified as recovered off-site outside the same NAICs. For organic liquid wastes disposed, the facility may recover solvents on site and produce a waste stream with a similar form as spent solvents. The screening process for the 1999 BRS data did not differentiate between solvent recovery residuals and spent solvents. A review of the wastes descriptions was conducted to determine if the organic liquid wastestreams were the result of onsite recovery and should be excluded from the analysis. Examples of wastes that should be removed from the analysis include still bottoms, distillation fractions, column bottoms. Other wastes streams with descriptions indicating a recovery process was employed were also flagged to be removed.

DPRA reviewed a total of 10 metals containing liquids generating facilities, representing \$1.9 million of a total of \$2.9 million in incremental cost savings without taxes (66 percent). Three facilities were identified that generate 3,621.5 tons of metals containing liquid waste streams with which the metals are ultimately recovered. The recovery facilities represent a total of \$0.56 million of the incremental costs savings without taxes, 29 percent of the reviewed facilities and 19 percent of the total incremental cost savings without taxes.

DPRA reviewed a total of 35 organic liquids generating facilities, representing \$87.9 million of a total of \$174.4 million in incremental cost savings without taxes (50 percent). Eight facilities were identified that generate 10,610 tons of organic liquid waste streams of which the description indicates them to be solvent recovery residuals. These facilities represent a total of \$23.9 million of the incremental costs savings without taxes, 27 percent of the reviewed facilities and 14 percent of the total incremental cost savings without taxes. The waste streams identified represent only a portion of the organic liquids generated at seven of the eight facilities; therefore, the identified wastes streams account for less than the facility totals of \$23.9 million incremental costs savings without taxes. DPRA estimates the waste streams represent 53 percent of the eight facilities incremental cost savings without taxes (\$46.6 million).

Metals Containing Liquids Generating Facilities Reviewed for Potential Metal Recovery Ultimate Disposal

Generator EPA ID	Total Offsite Shipped Quantity (tons)	Offsite Shipped Quantity (tons)	Management Method	Receiver EPA ID	Receiver Name
(→ Secondary Receiver Name)	Management Method for Precipitated Sludges		Conclusions		
NYD002241982	1773.4	169.9	Stabilization (M077)	PAD010154045	Envirite of Pennsylvania Inc.
	1603.5		Chemical precipitation in combination with biological treatment (M091)	NJD002385730	Dupont Chambers Works
ILD984774513	1233.1	1233.1	Chemical precipitation (M077)	ILD062480850	
→TXR0000000034			Phibro-Tech Inc		
→ECS Refining Texas LLC			No 1999 Biennial Report data for TXR0000000034		
WID000711077	1315.2	1315.2	Stabilization/chemical fixation (M111)	IND093219012	Heritage Environmental Svc - Indy
MND980680540	1514.5	1514.5	Chemical precipitation/other aqueous inorganic treatment (M077/M078)	MND981098478	US Filter Recovery Services Inc
			Remove facility from off-site disposal scenario to off-site recovery scenario.		
AZD980818330	1105.3	1105.3	Chemical oxidation followed by chemical precipitation (M074)	CAD008488025	Phibro-Tech Inc
			site disposal scenario to off-site recovery scenario.		
NOTE: WR-form says M014, <u>not</u> M074					
ILD067464875	1332.9	1288.6	Chemical precipitation (M077)	ILD000666206	
→(onsite M112)					
→MID000724831			Envirite of Illinois Inc.	Stabilization/chemical fixation (M111)	Stabilization/chemical fixation - likely landfilled - NOTE: GM-form says M112, <u>not</u> M077
	33.3		Transfer facility storage (M141)	ILD980502744	Safety-Kleen Corp
	11.0		Chemical precipitation (M077)	ILD062480850	(Unable to find related waste stream)
→TXR0000000034			Phibro-Tech Inc		
→ECS Refining Texas LLC			No 1999 Biennial Report data for TXR0000000034		
ILD984809905	760.9	760.9	Chemical precipitation (M077)	ILD000666206	
→(onsite M112)					
→MID000724831			Envirite of Illinois Inc.	Stabilization/chemical fixation (M111)	Stabilization/chemical fixation - likely landfilled - NOTE: GM-form says M112, <u>not</u> M077
ILD155126030	687.3	687.3	Chemical precipitation (M077)	ILD000666206	
→(onsite M112)					
→MID000724831			Envirite of Illinois Inc.	Stabilization/chemical fixation (M111)	Stabilization/chemical fixation - likely landfilled - NOTE: GM-form says M112, <u>not</u> M077
MND001037639	1001.8	1001.5	Chemical precipitation/other aqueous inorganic treatment (M077/M078)	MND981098478	US Filter Recovery Services Inc
			Remove facility from off-site disposal scenario to off-site recovery scenario.		
	0.2		Chemical precipitation (M077)	MND980996805	
→MND981098478			Enviro-Chem Inc		
→US Filter Recovery Services Inc			High temperature metals recovery (M011)	Remove facility from off-site disposal scenario to off-site recovery scenario.	
ILD984844134	601.3	601.3	Chemical precipitation (M077)	ILD000666206	
→(onsite M112)					
→MID000724831			Envirite of Illinois Inc.	Stabilization/chemical fixation (M111)	Stabilization/chemical fixation - likely landfilled - NOTE: GM-form says M112, <u>not</u> M077

Organic Liquids Generating Facilities Reviewed for Potential to be Solvent Recovery Residuals						
Generator EPA ID	Total Offsite Shipped Quantity (tons)		Offsite Shipped Quantity (tons)	Waste Description	Other Info	Conclusions
NJD002146504	3,760.6	0.1		WASTE PETROLEUM NAPTHA, COMBUSTIBLE LIQUID, FROM PARTS DEGREASING		
	3,760.5			FLAMMABLE LIQUID FROM PRODUCTION OR SUNSCREENS		
WID000808824	3,676.5	3,657.5	(no waste description)	F005, A34, B203		
	19.0		(no waste description)	F005, A37, B203		
WIR000046276	3,263.2	14.8	(no waste description)	F003, A09, B203		
	3,248.4		(no waste description)	D001, A09, B203		
	0.1		(no waste description)	D038, A59, B203		
	0.1		(no waste description)	D006, A19, B203		
	0.2		(no waste description)	U122, A58, B219		
TXD980626014	3,224.0	1,711.7		STYRENE WASTE OIL. THIS WASTE CONSISTS OF BENZENE, TOLUENE,		
	534.8			SPENT XYLENE. THE WASTE IS A SPENT XYLENE SOLVENT. IT IS A		
	1.8			FLAMMABLE ORGANIC LIQUIDS. THE WASTE CONSISTS OF ORGANIC LI		
	5.7			PAINT WASTE, LIQUID		
	954.2			NON-AQUEOUS LIQUID, TYPICALLY AS FOLLOWSHEPTANE ISOMERS 48%,		
	2.2			ANTIOXIDANT. THE WASTE IS A CLEAR LIGHT YELLOW LIQUID WITH		
IAD005272398	13.6			PARTS WASHER SOLVENT		
	2,830.7	17.2		DUPONT WASTE CODE = WFW-1 OBSOLETE NON-SALEABLE PAINT AND PA INT RELATED MATERIAL, ORGANIC LIQUID, FUELS BLENDING FOR CEM ENT KILN		
INCINERATION	1,737.0			DUPONT WASTE CODE = WOM-0; MIXED WASTE PAINT AND PAINT RELAT ED MATERIALS, ORGANIC LIQUIDS, TFE STILL BOTTOMS, FUELS FOR CEMENT KILN AND		
				Already a distillation by-product		
TREATMENT	1,076.6			DUPONT WASTE CODE = WOM-16; OCPSF PROCESS WASTEWATER, RESIN WATER OF REACTION, LOW SOLIDS LIQUID, SHIPPED OFF-SITE FOR BIOLOGICAL WATER		
WVD004325353 LVENT 140.	3,228.7	3,188.2		IGNITABLE, LISTED WASTE SOLVENTS FROM PROCESS EQUIPMENT CLEA NUP; CONTAINS TOLUENE, METHANOL, ISOPROPANOL, ETHANOL AND SO		
	0.1			IGNITABLE OFF-SPEC RAW MATERIAL, ISOPROPYL ALCOHOL.		
	1.6			IGNITABLE OFF-SPEC ORGANOFUNCTIONAL SILANE PRODUCT.		
	2.9			IGNITABLE, SILOXANE DISTILLATION/STRIPPING WASTE FROM PRODUC T MANUFACTURING.		Already a distillation by-product
	8.1			CORROSIVE OFF-SPEC RAW MATERIAL, POLYOXYALKYLENE BUTYL EHTER PHOSPHATE.		
	0.7			IGNITABLE, SILOXANE DISTILLATION/STRIPPING RESIDUE FROM PROD UCT MANUFACTURING CONTAINING ETHANOL.		Already a distillation by-product
	0.8			IGNITABLE WASTE FROM PROCESS EQUIPMENT CLEANUP WITH ETHANOL.		
	0.1			IGNITABLE, LISTED OFF-SPEC RAW MATERIAL, METHYLENE CHLORIDE.		
	0.2			LISTED OFF-SPEC RAW MATERIAL, TETRAHYDROFURAN.		
	0.2			IGNITABLE, LISTED WASTE SOLVENTS FROM PROCESS EQUIPMENT CLEA NUP CONTAINING TOLUENE AND METHANOL.		
	0.4			IGNITABLE OFF-SPEC RAW MATERIAL, DICYCLOPENTADIENE.		

	1.2	IGNITABLE, SILOXANE DISTILLATION/STRIPPING RESIDUE FROM PROD UCT MANUFACTURING.	Already a distillation by-product
	1.3	IGNITABLE OFF-SPEC RAW MATERIAL, ETHYLENE GLYCOL.	
	2.6	IGNITABLE, LISTED PAINT SOLVENTS FROM MAINTENANCE OPERATIONS .	
	20.3	IGNITABLE, LISTED WASTE SOLVENTS AND OFF-SPEC SURFACTANTS.	
NJD981080401	2,682.7	2,682.7 DISTILLATION FRACTIONS & STILL BOTTOMS AND SOLVENTS USED	Already a distillation by-product
TXD000461533	2,944.3	13.3 PAINT RELATED WASTE CONSISTS OF PAINT, PAINT THINNER, PAINT	
	597.0	ORGANIC ACID RESIDUES GENERATED DURING PRODUCTION OF ORGANIC	
	70.7	SPENT ACETONE/MSO WASTE GENERATED AT OLEFINS UNIT FROM ACETY	
	982.1	VINYL ACETATE POLYMER IS VISCOUS ORGANIC LIQUID MATERIAL RES	
	928.3	"A" DRIPOLENE IS STILL BOTTOMS GENERATED AS PART OF OLEFINS	Already a distillation by-product
	6.4	SPENT SOLVENTS, HALOGENATED & NON-HALOGENATED ORGANIC CHEMIC	
	0.2	METHANOL SYNOSOL WATER RESULTING FROM MIXTURE OF METHANOL, S	
	346.2	MIXED VARNISH WASTE IS VISCOUS LIQUID ORGANIC MATERIAL RESUL	
ARD052528809	2,876.3	19.2 TANK CLEANOUT, ONE TIME. (15) FLAMMABLE. CONTAINS TOLUENE. (13292)	
	0.7	MIXED LAB WASTES. (LAB) FLAMMABLE, TOXIC. CONTAINS ACETONE, METHANOL. (12654)	
	1.8	MIXED LAB WASTES. (LAB) FLAMMABLE, TOXIC. CONTAINS ACETONE, BENZENE. (9433)	
	5.0	MIXED LAB WASTES. (LAB) FLAMMABLE, TOXIC. CONTAINS ACETONE, DICHLOROMETHANE. (9276)	
	695.5	SPENT DISTILLATION CHASER FLUID, WASTE OIL. (DE) FLAMMABLE. (CP1374)	Already a distillation by-product
	0.6	DISTILLATION COLUMN BOTTOMS AND OVERHEADS. (AD) FLAMMABLE. (9345)	Already a distillation by-product
	2,145.1	DISTILLATION BY PRODUCT FROM PRODUCTION. (AD - PCO) FLAMMAB LE. (9710-06333)	Already a distillation by-product
	1.7	PAINT WASTE. (MAINT) TOXIC, FLAMMABLE. CONTAINS TOLUENE, XYL ENE. (9278)	
	6.6	TANK CLEANOUT, ONE TIME. (AD) FLAMMABLE. CONTAINS ADMA. (137 72)	
TXD008092793	2,451.1	2,404.5 MISCELLANEOUS ORGANIC LIQUIDS	
	46.6	HAZARDOUS NON-HALOGENATED SOLVENTS	
PRD090036021	2,589.0	60.7 AQUEOUS PHASE FROM PHARMACEUTICAL MANUFACTURING PROCESS.	
METHANOL, XYLENE, METHYL ISOBUTYL KETONE	1,968.6	IGNITABLE SPENT SOLVENT MIXTURE FROM PHARMACEUTICAL MANUFACT URING PROCESS; MIXTURE OF TOLUENE, ACETONE, ETHYL ACETATE, M ETHYLENE CHLORIDE,	
	5.8	DISCARDED SPENT HALOGENATED & NON-HALOGENATED SOLVENTS	
	535.5	IGNITABLE SPENT SOLVENT MIXTURE FROM PHARMACEUTICAL PROCESS; ACETONE, METHANOL, ETHYL ACETATE AND METHYLENE CHLORIDE.	
	14.2	DISCARDED FLAMMABLE WASTE FROM PHARMACEUTICAL MANUFACTURINGP ROCESS	
	4.2	OFF SPEC DISCARDED INTERMEDIATE ORGANIC LIQUIDS	
OHD076796887	2,766.8	155.1 DRUM LIQUIDS FROM RESIN MANUFACTURING	
	0.1	2K CLEARCOAT AND KILLED ISOCYANATE WASTE	
	0.2	AGED RAW MATERIAL: DIMETHYLETHANOLAMINE	
	5.3	AGED RAW MATERIAL: PHENOTIC RESIN SOLUTION	
	20.8	CLEANING SOLVENT BLEND USED IN RESIN MANUFACTURING	

	19.7	OFF-SPEC WATERBASED RESIN	
	2.4	WASTE MONOMER MIX FROM LABORATORY TESTING	
	293.3	OFF-SPEC SOLVENT BASED RESINS	
	70.9	WASTE TOLUENE AND METHYL CARBANATE SOLUTION	
	2,198.7	FLAMMABLE LIQUID DISTILLATE FROM RESIN MANUFACTURING	Already a distillation by-product
	0.4	KARL FISCHER REAGENT FROM LABORATORY TESTING	
VAD000019828	2,236.6	PAINT MANUFACTURER HAZARDOUS WASTE SOLVENT	
NJD002191211	2,283.3	15.9 METHYLENE CHLORIDE	
	0.2	WASTE SOLVENTS	
	2,267.2	BULK SOLVENTS BUILDING 30	
IAD045372836	2,432.7	1,047.9 BENZENE-CONTAINING PYROLYSIS OIL FROM ETHYLENE PRODUCTION: MIXTURE OF ORGANIC COMPONENTS.	
	1,354.5	IGNITABLE SPENT SOLVENT AND CO-MONOMER FROM LOW DENSITY POLYETHYLENE PRODUCTION: MIXTURE OF MINERAL SPIRITS AND VINYL ACETATE.	
	28.0	IGNITABLE SPENT SOLVENT AND CO-MONOMER FROM LOW DENSITY POLYETHYLENE PRODUCTION: MIXTURE OF MINERAL SPIRITS AND METHYL ACRYLATE.	
	0.2	IGNITABLE SPENT SOLVENT FROM OPERATIONAL CLEANOUT: MIXTURE OF ALIPHATIC HYDROCARBONS.	
TETRACHLOROETHENE.	0.2	IGNITABLE SPENT SOLVENTS FROM QUALITY CONTROL LABORATORY OPERATIONS: MIXTURE OF SOLVENTS, WITH MAIN COMPONENTS BEING CYCLOHEXANE AND	
	1.2	WASTE PAINT MATERIALS AND MIXTURE OF VARIOUS OIL-BASED PAINTS.	
TETRACHLOROETHENE.	0.7	IGNITABLE SPENT SOLVENTS FROM QUALITY CONTROL LABORATORY OPERATIONS: MIXTURE OF SOLVENTS, WITH MAIN COMPONENTS BEING CYCLOHEXANE AND	
TXD008090011	2,212.8	2,212.0 BY-PRODUCT ORGANICS FROM MERCAPTAN MANUFACTURING. TOWER BOT	
	0.8	WASTE PAINT THINNER AND PAINT COLLECTED IN 55 GALLON DRUMS	
TXR000025809	2,670.4	0.4 PAINT THINNER OR PETROLEUM DISTILLATES	Already a distillation by-product
	26.6	POLYETHYLENE AND POLYVINYLACETATE WAX IN VINYL ACETATE FRO	
	2,319.1	RECOVERED ORGANICS - SPENT CONTAMINATED LUBRICATING OILS, MI	
	11.8	SPENT PARTS WASHER SOLVENT	
	29.5	HEAVY AROMATIC HYDROCARBONS (ETHYLENE TARS)	
	15.2	POLYETHYLENE ADDITIVE SLURRY (AMINES, ANTIOXIDENTS & AMIDE	
	4.4	WASTE PAINT RELATED RESIDUES, EXCESS PAINT AND APPLICATOR	
	17.7	SPENT CYCLOHEXANE WASH SOLUTION	
	197.0	SPENT METHANOL USED IN CLEANING PROCESS VESSELS	
	21.9	RECOVERED, SPENT ORGANIC PEROXIDE IN MINERAL SPIRITS	
	2.5	OLD/CONTAMINATED FUEL	
	0.2	USED N-PROPANOL PUMP SEAL FLUIDS	
	24.2	SPENT LABORATORY SOLVENT WITH ANALYTICAL RESIDUES	
MOD985791995	2,158.5	1,437.9 IGNITABLE SPENT SOLVENT FROM PHARMACEUTICAL MFG PROCESS - MIXTURE OF METHANOL AND TOLUENE	
	485.6	SPENT SOLVENT FROM PHARMACEUTICAL MFG PROCESS SOLUTION OF METHYLENE CHLORIDE AND WATER WITH ACETONE	

	234.9	IGNITABLE SPENT SOLVENT FROM PHARMACEUTICAL MFG. PROCESS-TOL UENE	
KYD082390394	2,002.0	459.5 IGNITABLE, BARIUM, CHROMIUM, LEAD	
	1,542.5	IGNITABLE, LEAD, BARIUM, MEK,TOLUENE	
MAD980912323	2,947.1	1,111.0 TOXIC IGNITABLE SOLVENT (ACETONE, TOLUENE, BUTANOL, XYLENE) GENERATED FROM ORGANIC CHEMICAL FILTERING PROCESSING AND EQUIPMENT CLEANING.	
	3.6	DISTILLATION STILLBOTTOMS AND SPENT SOLVENT. CONTAINS METHYLENE CHLORIDE AND ANILINE.	Already a distillation by-product
WASTEWATER CONTROL EQUIPMENT, PRODUCT FILTERING AND EQUIPMENT CLEANOUTS.	566.1	TOXIC IGNITABLE AQUEOUS SOLUTION CONTAINS (ACETONE, TOLUENE, BUTANOL, METHANOL, CHLOROBENZENE) GENERATED FROM SITE AIR ABATEMENT EQUIPMENT,	
EQUIPMENT, WASTEWATER CONTROL EQUIPMENT, PRODUCT FILTERING AND EQUIPMENT CLEANOUTS.	783.5	TOXIC IGNITABLE AQUEOUS SOLUTION CONTAINS (ACETONE, TOLUENE, BUTANOL, METHYLENE CHLORIDE, METHANOL) GENERATED FROM SITE AIR ABATEMENT	
	48.9	IGNITABLE SOLVENT SOLUTION, BUTANOL CONTAMINATED WITH ETHYL ACETATE.	
	150.1	IGNITABLE AQUEOUS SOLUTION, CONTAINS ISOPROPANOL GENERATED FROM PRODUCT FILTERING.	
CHEMICAL DRYING.	20.0	WASTE SOLVENTS FROM DRYER CONDENSATE AND CAPTURED VENT OVERHEADS.(BUTANOL, ACETONE, ISOPROPANOL, CYCLOHEXANE) GENERATED FROM ORGANIC	
	8.7	SPENT INPROCESS SOLVENT WASTE, (METHANOL, TOLUENE, XYLENE, ISOPROPANOL, ETHYL ACETATE) GENERATED FROM ORGANIC CHEMICAL MANUFACTURE.	
	0.5	WASTE METHYLENE CHLORIDE AND ISOPROPANOL. GENERATED FROM ORGANIC CHEMICAL MANUFACTURING.	
ACETATE.	0.8	LABORATORY SOLVENT WASTE. GENERATED IN QUALITY AND RESEARCH LABORTORIES.	
	9.4	WASTE SOLVENTS FROM CONTAMINATED REACTION. (BUTANOL, ETHYL ACETATE) GENERATED WHEN INPROCESS REACTION BECAME CONTAMINATED WITH ETHYL	
	0.8	SPENT IGNITABLE, CORROSIVE SOLVENT USED IN VESSEL CLEANING (ACETONE, HYDROCHLORIC ACID) GENERATED FROM PROCESS VESSEL CLEANING.	
	0.3	IGNITABLE, TOXIC AND CORROSIVE CLEANOUT SOLUTION, (ACETONE, METHYLENE CHLORIDE, HYDROCHLORIC ACID). GENERATED FROM VESSEL CLEANING.	
	18.6	SPENT TOXIC SOLVENT, (METHYLENE CHLORIDE). SENT OFFSITE FOR RECOVERY. GENERATED FROM ORGANIC CHEMICAL MANUFACTURE.	
a distillation by-product	42.5	DISTILLATION STILLBOTTOMS AND SPENT SOLVENT. CONTAINS ISOPROPANOL OR CYCLOHEXANE. GENERATED FROM ONSITE SOLVENT RECOVERY.	Already
	2.4	IGNITABLE WASTE OIL, CONTAMINATED WITH CYCLOHEXANE. GENERATED FROM OIL CHANGES ON VACCUM PUMPS.	
	1.0	INPROCESS SOLVENT SAMPLE STREAMS CONTAINING, METHANOL, TOLUENE, ACETONE OR ACETIC ACID. GENERATED FROM SAMPLING ORGANIC CHEMICAL REACTIONS.	
	6.0	SPENT SOLVENTS GENERATED FROM PROCESS CLEANOUTS. (METHANOL, ISOPROPANOL, BUTANOL)	
	99.7	DISTILLATION STILLBOTTOMS AND SPENT SOLVENT. CONTAINS METHYLENE CHLORIDE AND PYRIDINE.	Already a distillation by-product
	2.7	SPENT PROCESS SOLVENT (PROPIONIC ACID) GENERATED IN ORGANIC CHEMICAL MANUFACTURE.	
	0.2	SPENT PROCESS SOLVENT, (PROPIONIC ACID, M-CRESOL) GENERATED IN ORGANIC CHEMICAL MANUFACTURE.	
AND HYDROCHLORIC ACID.	13.1	SPENT IGNITABLE, CORROSIVE, TOXIC LIQUID GENERATED FROM DISTILLATION OF SOLVENTS FROM ORGANIC CHEMICAL MANUFACTURING. CONTAINS CHLOROBENZENE	
	57.5	SPENT IGNITABLE, TOXIC, CORROSIVE LIQUID. GENERATED FROM THE DISTILLATION OF SOLVENTS IN ORGANIC CHEMICAL MANUFACTURING. CONTAINS CHLOROBENZENE, METHANOL AND HYDROCHLORIC ACID.	Already a distillation by-product
PAD042259374	1,842.2	1,841.9 WASTE FLAMMABLE LIQUID, HEPTANE/TOLUENE SOLUTION SEPARATED F ROM CAUSTIC WASH	

	0.2	WASTE COMBUSTIBLE LIQUID, PETROLEUM NAPHTHA USED AS A PARTS CLEANER IN MAINTENANCE SHOP
TXD980867345	1,804.0	7.1 RESIN WASTE - OFF-GRADE NON-SALABLE RESIN USED IN FUEL SUPPL
	61.5	MIXED SOLVENTS FROM PROCESS AID OF REACTIONS - 10,000 GAL. T
	1,735.4	AQUEOUS/SOLVENT SOLUTION - CHEMICALS/WASTEWATER FROM REACTIO
PAD003008943	1,741.4	9.3 INKS, DYES, ALCOHOLS AND ADHESIVES FROM CONSUMER HEALTHCARE PRODUCTS AND PHARMAUCEUTICALS PACKAGING OPERATIONS
	0.8	MIXTURE CONTAINING PETROLEUM NAPHTHA USED IN MACHINERY PARTS WASHER
	1,695.0	OFF-SPEC PRODUCTION WASTE CONTAINING FLAMABLE LIQUIDS
	33.5	ALCOHOLS MIXTURES USED IN THE PRODUCTION OF CONSUMER HEALTHC ARE PRODUCTS AND PHARMACEUTICALS
	2.9	OUT-DATED OR EXPIRED FLAVORINGS USED IN THE PRODUCTION OF CO NSUMER HEALTHCARE PRODUCTS
PRD090346909	1,618.1	IGNITABLE SPENT SOLVENT FROM THE PRODUCTION OF PHARMACEUTICA LS PRODUCT.
LAD003913183	1,491.5	WASTE FLAMMABLE LIQUIDS (ETHANOL/PROPANOL)
OHD004282976	1,558.9	1,153.9 WASTE FLAMMABLE LIQUID - SPENT SOLVENT
	136.3	WASTE GELLED ALKYD RESIN CONTAINING NAPHTHA
	268.8	WASTE OFF SPECIFICATION SOLVENT BORNE PAINT
TXD096037932	1,596.0	956.0 MIXED ORGANIC LIQUIDS WITH 140 F.
	637.6	WASTE ISOBUTANOL AND DIOL
	0.6	FURFURAL WASTE
	1.8	ISOBUTYRALDEHYDE WASTE
TXD980625966	1,510.0	1,494.8 RED OIL AND RED OIL POLYMER WITH HAN
	15.1	METHANOL/PROPANOL MIXTURE
	0.1	DIMETHYL SULFIDE
GAD075876623	1,569.7	0.0 SPENT SOLVENT FROM QUALITY CONTROL TESTING (CONTAINS PYRIDIN E AND DICHLOROMETHANE), IGNITABLE AND TOXIC
	6.1	ORGANIC DEFECTIVE PAINT, IGNITABLE, TOXIC FOR METALS AND MEK
	388.7	DEFECTIVE SOLVENT BASED PAINT AND SPENT SOLVENT (IGNITABLE A ND TOXIC-CONTAINS METALS AND SOLVENT)
	1.6	EPOXY PRIMER, IGNITABLE
	1,173.3	SPENT SOLVENT FROM CLEANING PAINT PRODUCTION EQUIPMENT, IGNI TABLE AND TOXIC
TXD008088833	1,574.2	0.7 MIXED LIQUID LABORATORY WASTE FROMTECHNICAL LABORATORY ACTIV
	37.9	POLYMER BLOWDOWN CONAINING SOLVENT. INITIAL GENERATION 1996
	1,497.1	SPENT NON-HALOGENATED SOLVENT FROM LOW DENSITY POLYETHYLENE
	0.2	HALOGENATED LABORATORY SOLVENT FROM QUALITY CONTROL LABORATO
	0.4	QUALITY CONTROL LABORATORY WASTE. FIRST GENERATED 1980.
	1.7	PILOT PLANT WASTE SOLVENT GENERATED DURING POLYETHYLENE
	5.0	PLANT DEGREASER, HAZARDOUS LIQUID. MAINTENANCE PARTS WASHER
	1.3	PAINT THINNER, CHLOROBENZENE.
	0.5	SP SOLVENT/MONOMER/AND ADDITIVES
	29.4	SPECIALTY POLYMER WASTE INACTIVE CATALYST. GENERATED DURING
	0.1	POLYARD, HAZARDOUS, LIQUID, RESIDUE FROM LOW DENSITY POLYETH
TXD008088247	1,550.6	31.2 BCHLOR WASH WATER

	18.7	DIOL WASTE FROM THE MANUFACTURE AND PURIFICATION OF DIOL PRO
	919.2	DBE REACTOR BOTTOMS / MANUFACTURE OF DIBASIC ESTERS
	562.4	REACTOR WASH SOLUTION / PROCESS EQUIPMENT CLEANING / FEB. 19
	0.2	OTHER ORGANIC LIQUIDS
	0.2	LIQUID WASTE FROM THE MANUFACTURE OF SIMA.
	0.7	BENZYL CHLORIDE WASTES
	18.0	AQUEOUS REACTOR WASH SOLUTION
CAD070635669	1,266.5	FLAMMABLE SPENT SOLVENT FROM THE MANUFACTURING OF BULK PHARMACEUTICALS WHICH INCLUDE A MIXTURE OF TOLUENE, METHANOL ISOPROPYL ALCOHOL, ETHYL ACETATE AND ETHANOL
LAD098168206	1,259.0	HEAVY ENDS/OFF-SPEC PRODUCT FROM PRODUCTION OF ETHYLENE DICH LORIDE BY "DIRECT CHLORINATION" PROCESS, EDC, 1,1,2-TRICHLOR OETHYLENE, BIS-2 CHLOROETHYL ETHER
TXD065096273	1,677.9	24.6 OFF SPECIFICATION BUTYL ACRYLATE
	0.1	LIGHT ENDS FROM BUTYL METHACRYLATE/ISO-BUTYL METHACRYLATE PR
	1.9	IMMERSION SOLVENT USED IN SAFETY KLEEN PARTS WASHERS
	3.0	PAINT/THINNER MIXTURES. GENERATED FROM PAINTING AND MAINTEN
	865.5	81R RESIDUE. MANUFACTURING WASTE FROM THE PRODUCTION OF 81R
	49.0	METHYL METHACRYLATE, OFF SPEC PRODUCT.
	455.5	B-3 LIGHT ENDS. MANUFACTURING BYPRODUCT OF MMA AND MAA PROD
	11.7	OFF SPEC METHACRYLIC ACID PRODUCT
	17.1	METHYL METHACRYLATE TANK WASHINGS AND DISCHARGES. FROM CRUD
	0.0	SAFETY KLEEN SOLVENT, USED IN DEGREASING OPERATIONS AND PART
	226.0	BMA BLEED STRIPPER BOTTOMS. MANUFACTURING WASTE FROM THE PR
	23.3	ACETIC ACID, COPRODUCT OF ACRYLIC ACID PRODUCTION. DISCARDE
WVD005005483	1,823.8	385.3 IGNITABLE MATERIAL FROM UNIT PRODUCTION (PVA/IPA STREAM)
	0.2	DISCARDED RAW MATERIAL CYCLOHEXANONE.
	440.6	IGNITABLE RESIDUES CONTAINING CHROMIUM FROM UNIT PRODUCTION (CBM RESIDUES).
	1.8	MISCELLANEOUS IGNITABLE ORGANIC MATERIALS FROM PLANT LABORAT ORY.
	6.2	PAINT WASTE CONTAINING VARIOUS SOLVENTS.
	368.9	IGNITABLE MATERIAL FROM PRODUCTION (PVA RESIDUES).
	2.1	MISCELLANEOUS IGNITABLE OUT-OF-DATE PRODUCTS.
	49.1	IGNITABLE RESIDUES FROM PRODUCTION OF DIENE 299 CONTAINING A LCOHOLS.
	414.1	IGNITABLE RESIDUES CONTAINING BENZENE FROM UNIT PRODUCTION (MVA RESIDUES).
	18.4	IGNITABLE MATERIAL FROM UNIT PRODUCTION (PVA LA-1 WASTE).
	42.6	IGNITABLE RESIDUES CONTAINING BENZENE AND METHYL ETHYL KETO NE FROM UNIT PRODUCTION (ACETONE RECOVERY).
	55.0	FLAMMABLE WASTE FROM OVERHEAD STRIP; MIXTURE CONTAINS ISOPRO PANOL AND VINYL ETHYL ETHER.
	39.6	IGNITABLE RESIDUES CONTAINING BENZENE AND METHYL ETHYL KETON E FROM UNIT PRODUCTION (MVA RESIDUES).